* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 17:30:56 ON 22 APR 2008

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 17:31:21 ON 22 APR 2008

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 APR 2008 HIGHEST RN 1016194-13-0
DICTIONARY FILE UPDATES: 21 APR 2008 HIGHEST RN 1016194-13-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> s palladium/cn
L1 1 PALLADIUM/CN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN
RN 7440-05-3 REGISTRY
ED Entered STN: 16 Nov 1984
CN Palladium (CA INDEX NAME)
OTHER NAMES:
CN E 101O/W
CN IG 0218A
CN MPP 030
CN MPP 050

CN MPP 080
CN P 50
CN P 50 (metal)
CN Palladex 600
CN Palladium black
CN Palladium element
CN SFP 1001P
MF Pd
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Pd

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

101891 REFERENCES IN FILE CA (1907 TO DATE)
7450 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
102046 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	7.61	7.82

FILE 'CAPLUS' ENTERED AT 17:31:56 ON 22 APR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 22 Apr 2008 VOL 148 ISS 17
FILE LAST UPDATED: 21 Apr 2008 (20080421/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.

They are available for your review at:

http://www.cas.org/infopolicy.html

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=> s 7440-05-3/pur
        102046 7440-05-3
        278645 PUR/RL
L2        1377 7440-05-3/PUR
               (7440-05-3 (L) PUR/RL)

=> s l2 and ibuprofen
         11550 IBUPROFEN
L3           1 L2 AND IBUPROFEN

=> d ibib abs hitstr

L3   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2004:965202  CAPLUS
DOCUMENT NUMBER:          141:395290
TITLE:                    Process for the adsorptive separation of palladium
                          catalyst from crude reaction mixtures of arylacetic
                          acids obtained by carbonylation
INVENTOR(S):              Sava, Xavier; Roeper, Michael; Orgill, Colin; Cooper,
                          John
PATENT ASSIGNEE(S):       BASF Aktiengesellschaft, Germany
SOURCE:                   PCT Int. Appl., 13 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2004096747         A1    20041111    WO 2004-EP4047          20040416
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
     US 20060252938        A1    20061109    US 2005-554247          20051025
PRIORITY APPLN. INFO.:                       US 2003-466123P     P   20030428
                                             WO 2004-EP4047      W   20040416
OTHER SOURCE(S):          MARPAT 141:395290
AB   A process for the separation of palladium from aromatic carboxylic
acid-containing
     crude reaction mixts. (e.g., ibuprofen) obtained by the
     palladium-catalyzed carbonylation of arylalkanols [e.g.,
     1-(4-isobutylphenyl)ethanol] is achieved by adsorption of the palladium on
     solid adsorbents (e.g., activated carbon) where the adsorption is carried
```

out in the absence of a reducing agents for palladium and at a temperature where
the crude reaction mixture is molten.
IT 7440-05-3P, Palladium, preparation
RL: CAT (Catalyst use); NUU (Other use, unclassified); PUR (Purification or recovery); PREP (Preparation); USES (Uses)
(process for the adsorptive separation of palladium catalyst from crude reaction mixts. of arylacetic acids obtained by carbonylation)
RN 7440-05-3 CAPLUS
CN Palladium (CA INDEX NAME)

Pd

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s naproxen or ketoprofen or flurbiprofen or indoprofen or suprofen or hexaprofen or pirprofen or fenoprofen or cicloprofen or mexoprofen or benoxaprofen or carprofen
6566 NAPROXEN
5317 KETOPROFEN
3267 FLURBIPROFEN
489 INDOPROFEN
725 SUPROFEN
5 HEXAPROFEN
333 PIRPROFEN
1348 FENOPROFEN
59 CICLOPROFEN
3 MEXOPROFEN
497 BENOXAPROFEN
662 CARPROFEN
L4 12884 NAPROXEN OR KETOPROFEN OR FLURBIPROFEN OR INDOPROFEN OR SUPROFEN OR HEXAPROFEN OR PIRPROFEN OR FENOPROFEN OR CICLOPROFEN OR MEXOPROFEN OR BENOXAPROFEN OR CARPROFEN

=> s l4 and l2
L5 1 L4 AND L2

=> s l2 and arylacetic acid
560 ARYLACETIC
4567237 ACID
273 ARYLACETIC ACID
(ARYLACETIC(W)ACID)
L6 0 L2 AND ARYLACETIC ACID

=> s l2 and aryl acetic acid
227141 ARYL
260319 ACETIC
4567237 ACID
35 ARYL ACETIC ACID
(ARYL(W)ACETIC(W)ACID)
L7 0 L2 AND ARYL ACETIC ACID

=> s l2 and aryl?

```
        317904 ARYL?
L8          18 L2 AND ARYL?

=> s l8 and acetic acid
        260319 ACETIC
       4567237 ACID
        226707 ACETIC ACID
                  (ACETIC(W)ACID)
L9           0 L8 AND ACETIC ACID

=> s l8 and acid
       4567237 ACID
L10          8 L8 AND ACID

=> d 1-8 ibib abs hitstr

L10  ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2007:66999  CAPLUS
DOCUMENT NUMBER:          146:274004
TITLE:                    Recyclable and ligandless Suzuki coupling catalyzed by
                          carbon nanotube-supported palladium nanoparticles
                          synthesized in supercritical fluid
AUTHOR(S):                Pan, Horng-Bin; Yen, Clive H.; Yoon, Byunghoon; Sato,
                          Masaki; Wai, Chien M.
CORPORATE SOURCE:         Department of Chemistry, University of Idaho, Moscow,
                          ID, USA
SOURCE:                   Synthetic Communications (2006), 36(23), 3473-3478
                          CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER:                Taylor & Francis, Inc.
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
OTHER SOURCE(S):          CASREACT 146:274004
AB   Carbon nanotube-supported palladium nanoparticles prepared by a supercrit.
     fluid deposition method show high activities for catalyzing Suzuki
     coupling reactions, and the catalysts can be recycled and reused at least
     six times without losing activity.
IT   7440-05-3P, Palladium, preparation
     RL: CAT (Catalyst use); PUR (Purification or recovery); SPN
     (Synthetic preparation); PREP (Preparation); USES (Uses)
        (deposited on multi-walled carbon nanotubes; Suzuki coupling reaction
        of Ph boronic acid with aryl halides to biaryls
        using carbon nanotube-supported palladium nanoparticles catalyst
        obtained in supercrit. fluid)
RN   7440-05-3  CAPLUS
CN   Palladium  (CA INDEX NAME)


Pd


REFERENCE COUNT:          15    THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10  ANSWER 2 OF 8  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2006:637724  CAPLUS
DOCUMENT NUMBER:          146:316548
```

TITLE: Recoverable palladium(0) on poly(vinylpyrrolidone) catalyzed ligand-free Suzuki reaction in water
AUTHOR(S): Wang, Lei; Li, Pin-Hua
CORPORATE SOURCE: Department of Chemistry, Huaibei Coal Teacher College, Huaibei, Anhui, 235000, Peop. Rep. China
SOURCE: Chinese Journal of Chemistry (2006), 24(6), 770-774
CODEN: CJOCEV; ISSN: 1001-604X
PUBLISHER: Shanghai Institute of Organic Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:316548

AB In the absence of any ligand, a recoverable palladium(0) on poly(vinylpyrrolidone) (PVP) catalyzed Suzuki reaction of aryl iodide and bromide with potassium aryltrifluoroborate was developed. The reaction conditions involved the use of water as the solvent, potassium carbonate as the base, and PVP supported palladium metal colloid as the catalyst. The palladium metal could be recovered and recycled for eight consecutive trials without significant loss of its activity.

IT 7440-05-3P, Palladium, preparation
RL: CAT (Catalyst use); PUR (Purification or recovery); PREP (Preparation); USES (Uses)
(supported on poly(vinylpyrrolidone), recoverable; ligand-free Suzuki reaction of aryl halides with potassium aryltrifluoroborates in water using poly(vinylpyrrolidone)-supported palladium(0) catalyst)
RN 7440-05-3 CAPLUS
CN Palladium (CA INDEX NAME)

Pd

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:1080719 CAPLUS
DOCUMENT NUMBER: 142:57220
TITLE: Methods to remove metallic impurities from polymers to improve optoelectronic performance of devices fabricated from these polymers
INVENTOR(S): Xiao, Steven Shuyong; Qiu, Chunong; Qiu, Cindy Xing
PATENT ASSIGNEE(S): Organic Vision Inc., Can.
SOURCE: U.S. Pat. Appl. Publ., 13 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040254336	A1	20041216	US 2003-461909	20030616
US 6894145	B2	20050517		
PRIORITY APPLN. INFO.:			US 2003-461909	20030616

AB The methods involve dissolving the polymer in a suitable solvent, adding a scavenger or chelating agent, mixing to form a scavenger- or chelating agent-containing phase, and finally separating the scavenger- or chelating agent-containing phase from the polymer phase. The polymers include polyarylenes, polyarylenevinylenes, polyaryleneethylnylene, polyfluorenes, polyanilines, polythiophenes, polypyrroles, and any conjugated copolymers. Preferable scavengers have functional groups which can react with metallic species and form a coordination compound that is not soluble in a selected solvent. The selected scavenger can be used in a free stand form or carried by either organic or inorg. media.

IT 7440-05-3P, Palladium, preparation
RL: PUR (Purification or recovery); PREP (Preparation)
(methods to remove metallic impurities from polymers to improve optoelectronic performance of devices fabricated from these polymers)

RN 7440-05-3 CAPLUS
CN Palladium (CA INDEX NAME)

Pd

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:965202 CAPLUS
DOCUMENT NUMBER: 141:395290
TITLE: Process for the adsorptive separation of palladium catalyst from crude reaction mixtures of arylacetic acids obtained by carbonylation
INVENTOR(S): Sava, Xavier; Roeper, Michael; Orgill, Colin; Cooper, John
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004096747	A1	20041111	WO 2004-EP4047	20040416
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20060252938	A1	20061109	US 2005-554247	20051025
PRIORITY APPLN. INFO.:			US 2003-466123P P	20030428

WO 2004-EP4047 W 20040416
OTHER SOURCE(S): MARPAT 141:395290
AB A process for the separation of palladium from aromatic carboxylic acid -containing crude reaction mixts. (e.g., ibuprofen) obtained by the palladium-catalyzed carbonylation of arylalkanols [e.g., 1-(4-isobutylphenyl)ethanol] is achieved by adsorption of the palladium on solid adsorbents (e.g., activated carbon) where the adsorption is carried out in the absence of a reducing agents for palladium and at a temperature where
the crude reaction mixture is molten.
IT 7440-05-3P, Palladium, preparation
RL: CAT (Catalyst use); NUU (Other use, unclassified); PUR (Purification or recovery); PREP (Preparation); USES (Uses)
(process for the adsorptive separation of palladium catalyst from crude reaction mixts. of arylacetic acids obtained by carbonylation)
RN 7440-05-3 CAPLUS
CN Palladium (CA INDEX NAME)

Pd

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:792265 CAPLUS
DOCUMENT NUMBER: 137:294772
TITLE: Recovery of carbonylation catalysts from diaryl carbonate-containing solutions without deactivation
INVENTOR(S): Ohashi, Kenji; Nagashima, Ryoichi; Zenri, Terunobu
PATENT ASSIGNEE(S): Teijin Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002302468	A	20021018	JP 2001-105624	20010404

PRIORITY APPLN. INFO.: JP 2001-105624 20010404
OTHER SOURCE(S): MARPAT 137:294772
AB In recovering catalysts from solns. containing CO(OR)2 [R = (un)substituted C6-15 aryl] prepared by oxidative carbonylation of ROH (R = same as above) with CO and mol. O in the presence of the catalysts and solvents, the reaction mixts. are subjected to flash separation to remove H2O by adiabatic vaporization and the residues are mixed with the same solvents used in the carbonylation to selectively crystallize the diaryl carbonates. The mother liqs. containing the catalysts are returned to the carbonylation reactor for reuse. Thus, PhOH was autoclaved with CO, O, Pd acetylacetonate (I), Mn acetylacetonate (II), heteropoly acid (III), and Bu4NBr at 80° for 9 h in MeOCMe3 and the reaction mixture was introduced to a flash tank to remove H2O. The solvent was added to

the residue, cooled, and filtered to give a mother liquid, in which 98.9% I, 89.1% II, 84.6% III, and 98.8% Bu4NBr were recovered.
IT 7440-05-3P, Palladium, preparation
RL: CAT (Catalyst use); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process); USES (Uses)
(recovery of carbonylation catalysts from diaryl carbonate-containing solns. without deactivation)
RN 7440-05-3 CAPLUS
CN Palladium (CA INDEX NAME)

Pd

L10 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:654405 CAPLUS
DOCUMENT NUMBER: 133:222445
TITLE: Preparation of N-alkylarylamines
INVENTOR(S): Nishimura, Takeshi; Takeda, Fuminori; Wada, Masaru
PATENT ASSIGNEE(S): Mitsui Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000256278	A	20000919	JP 1999-65726	19990312

PRIORITY APPLN. INFO.: JP 1999-65726 19990312
OTHER SOURCE(S): CASREACT 133:222445
AB Title compds. are prepared by reductive alkylation of arylamines or aromatic nitro compds. with aldehydes in the presence of noble metal catalysts and the catalysts can be recovered and reused. Thus, reaction of 3-aminobenzoic acid with 37% aqueous HCHO in MeOH in the presence of 5% Pd/C at 5 kg/cm2 H2 and 50° to give 95.5% 3-dimethylaminobenzoic acid, the catalyst was separated and treated with 2% aqueous NaOH for reuses.
IT 7440-05-3P, Palladium, preparation
RL: CAT (Catalyst use); PUR (Purification or recovery); PREP (Preparation); USES (Uses)
(preparation of N-alkylarylamines by reductive alkylation)
RN 7440-05-3 CAPLUS
CN Palladium (CA INDEX NAME)

Pd

L10 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:169318 CAPLUS
DOCUMENT NUMBER: 124:207908

TITLE: Separation and recovery of palladium and silver
INVENTOR(S): Inoe, Katsutoshi
PATENT ASSIGNEE(S): Shoei Kagaku Kogyo Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07331349	A	19951219	JP 1994-157782	19940607

PRIORITY APPLN. INFO.: JP 1994-157782 19940607
OTHER SOURCE(S): MARPAT 124:207908
AB Aqueous HNO3 solns. containing Pd and Ag are brought into contact with extraction
agents containing R1R2R3N (R1 = C1-25 linear or side chain-having alkyl, alkoxy, aryl, alkaryl; R2, R3 = H, R1) or R4R5R6R7N+.A- (R4-7 = R1; A- = monovalent inorg. anion) and R8OH (R8 = C8-16 linear or side chain-having alkyl) or (R9O)(R10O)(R11O)PO (R9-11 = C4-8 linear or side chain-having alkyl) to selectively extract Pd. The process gives low loss and base metal contamination.
IT 7440-05-3P, Palladium, preparation
RL: PUR (Purification or recovery); PREP (Preparation)
(separation and recovery of)
RN 7440-05-3 CAPLUS
CN Palladium (CA INDEX NAME)

Pd

L10 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:99385 CAPLUS
DOCUMENT NUMBER: 110:99385
ORIGINAL REFERENCE NO.: 110:16375a,16378a
TITLE: Solvent extraction of palladium
INVENTOR(S): Okuda, Akihiko; Ichiishi, Tomoshi
PATENT ASSIGNEE(S): Tanaka Noble Metal Industrial Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 2 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63286528	A	19881124	JP 1987-120896	19870518

PRIORITY APPLN. INFO.: JP 1987-120896 19870518
OTHER SOURCE(S): MARPAT 110:99385
AB Pd is extracted from a Pd-containing HCl solution by an organic phase containing a C6-15
alc. and a water-insol. nonvolatile solvent having functional groups of

R1SR2 and SPR3R4R5, where R1-5 is alkyl, aryl, or aralkyl group.
Thus, aqueous 3N HCl containing 10 g Pd/L and metallic impurities was extracted with
an organic phase containing 20 volume% each of dihexyl sulfide and 2-ethylhexyl alc. and 20 g/L of triisobutylphosphine sulfide. The extraction yielded no ppts., but it did in the absence of 2-ethylhxyl alc.
IT 7440-05-3P, Palladium, preparation
RL: PUR (Purification or recovery); PREP (Preparation)
(recovery of, from acid solution, by solvent extraction)
RN 7440-05-3 CAPLUS
CN Palladium (CA INDEX NAME)

Pd

=> d his

(FILE 'HOME' ENTERED AT 17:30:56 ON 22 APR 2008)

FILE 'REGISTRY' ENTERED AT 17:31:21 ON 22 APR 2008
L1 1 S PALLADIUM/CN

FILE 'CAPLUS' ENTERED AT 17:31:56 ON 22 APR 2008
L2 1377 S 7440-05-3/PUR
L3 1 S L2 AND IBUPROFEN
L4 12884 S NAPROXEN OR KETOPROFEN OR FLURBIPROFEN OR INDOPROFEN OR SUPRO
L5 1 S L4 AND L2
L6 0 S L2 AND ARYLACETIC ACID
L7 0 S L2 AND ARYL ACETIC ACID
L8 18 S L2 AND ARYL?
L9 0 S L8 AND ACETIC ACID
L10 8 S L8 AND ACID

=> s l4 and carbony?
211791 CARBONY?
L11 183 L4 AND CARBONY?

=> s l11 and aryl? and (ester or acid)
317904 ARYL?
619182 ESTER
4567237 ACID
L12 50 L11 AND ARYL? AND (ESTER OR ACID)

=> s l12 and adsor?
632964 ADSOR?
L13 1 L12 AND ADSOR?

=> d ibib abs hitstr

L13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:965202 CAPLUS
DOCUMENT NUMBER: 141:395290
TITLE: Process for the adsorptive separation of

palladium catalyst from crude reaction mixtures of arylacetic acids obtained by carbonylation

INVENTOR(S): Sava, Xavier; Roeper, Michael; Orgill, Colin; Cooper, John

PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 13 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004096747	A1	20041111	WO 2004-EP4047		20040416
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
US 20060252938	A1	20061109	US 2005-554247		20051025
PRIORITY APPLN. INFO.:			US 2003-466123P	P	20030428
			WO 2004-EP4047	W	20040416

OTHER SOURCE(S): MARPAT 141:395290

AB A process for the separation of palladium from aromatic carboxylic acid -containing crude reaction mixts. (e.g., ibuprofen) obtained by the palladium-catalyzed carbonylation of arylalkanols [e.g., 1-(4-isobutylphenyl)ethanol] is achieved by adsorption of the palladium on solid adsorbents (e.g., activated carbon) where the adsorption is carried out in the absence of a reducing agents for palladium and at a temperature where the crude reaction mixture is molten.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> s l12 and  carbon
       1357530 CARBON
L14         13 L12 AND  CARBON

=> d 1-13 ibib abs hitstr
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L14 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1065801 CAPLUS

DOCUMENT NUMBER: 145:397236

TITLE: Palladium catalytic carbonylation process for the preparation of 2-arylpropionic acids from 1-arylethanols and carbon dioxide

INVENTOR(S): Chaudhari, Raghunath Vitthal; Abdul, Seayad; Seayad, Jayasree
PATENT ASSIGNEE(S): Council of Scientific & Industrial Research, India
SOURCE: Indian, 25 pp.
CODEN: INXXAP
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 191417	A1	20031129	IN 1999-DE685	19990505

PRIORITY APPLN. INFO.: IN 1999-DE685 19990505
OTHER SOURCE(S): CASREACT 145:397236; MARPAT 145:397236
AB 2-Arylpropionic acids R5R4CR3CR2R1CO2H [R1 = (un)substituted aryl, (un)substituted naphthyl; R2-R5 = H, (un)substituted aryl, (un)substituted arylalkyl, (un)substituted cycloaliph.] are prepared in high yield and selectivity by the carbonylation of 1-arylethanols R5R4CR3CR2R1OH [e.g., 1-(4-isobutylphenyl)ethanol] in the presence of a carbonylation catalyst system comprising an alkali metal halide (e.g., LiCl), an organic sulfonic acid (e.g., p-toluenesulfonic acid), 1-6 volume% water, and a Pd0 complex or a Pd2+ complex [e.g., PdCl2(PPh3)2], and a solvent(e.g., 2-butanone), with carbon monoxide under homogeneous conditions at 30-130°/50-1500 psig for 0.3-2 h, flushing the reaction vessel with inert gas, removing the solvent by conventional methods, separating the catalyst, and isolating 2-arylpropionic acid (e.g., ibuprofen).

L14 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1050338 CAPLUS
DOCUMENT NUMBER: 145:397235
TITLE: Catalytic carbonylation and hydrolysis process for the preparation of 2-arylpropionic acids from 1-aryl-1-haloethanes
INVENTOR(S): Chaudhari, Raghunath Vitthal; Majeed, Seayad Abdul; Seayad, Jayasree
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India
SOURCE: Indian, 24 pp.
CODEN: INXXAP
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 191488	A1	20031206	IN 1999-DE683	19990505

PRIORITY APPLN. INFO.: IN 1999-DE683 19990505
OTHER SOURCE(S): CASREACT 145:397235; MARPAT 145:397235
AB 2-Arylpropionic acids R4C(R3)(R5)C(R1)(R2)CO2H [I; R1 = (un)substituted aryl, (un)substituted naphthyl; R2-R5 = H, (un)substituted alkyl, (un)substituted aryl, (un)substituted arylalkyl, (un)substituted cycloaliph.; e.g., ibuprofen] are prepared in high yield and selectivity which comprises the

carbonylation and subsequent hydrolysis of arylalkyl halides R4C(R3)(R5)C(R1)(R2)X [X = Cl, Br, I; e.g., 1-(4-isobutylphenyl)ethyl chloride] in the presence of an organic sulfonic acid (e.g., p-toluenesulfonic acid), water, a palladium catalyst, and halide promoter (e.g., LiCl) in the range of 5-500 mol per mol of catalyst in an organic solvent such as ketones (e.g., 2-butanone) or cyclic ethers in a carbon monoxide atmospheric under homogeneous conditions at 30-130°/50-1500 psig for 0.3-4 h, then cooling the reaction mixture to ambient temperature, flushing the reaction vessel with inert gas, removing the solvent by conventional methods, separating the catalyst, and isolating I.

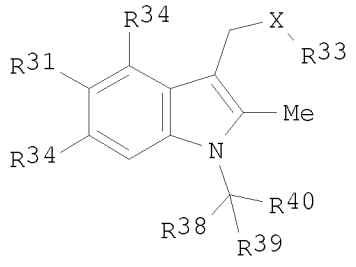
L14 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:975669 CAPLUS
DOCUMENT NUMBER: 145:356642
TITLE: Preparation of 2-methylindoles as cyclooxygenase-2 selective inhibitors
INVENTOR(S): Wey, Shiow-Jyi; Garvey, David S.; Fang, Xinqin; Richardson, Stewart K.
PATENT ASSIGNEE(S): Nitromed, Inc., USA
SOURCE: PCT Int. Appl., 122pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006099416	A1	20060921	WO 2006-US9127	20060313

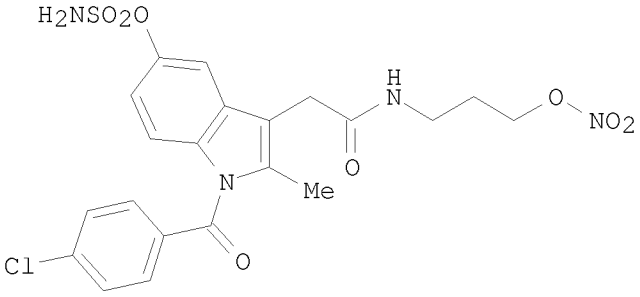
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2005-660436P P 20050311
OTHER SOURCE(S): MARPAT 145:356642
GI



I



II

AB The invention describes compns. and kits comprising 2-methylindole cyclooxygenase 2 (COX-2) selective inhibitors I [R31 = alkoxy, OH, aminosulfonyloxy; R33 = H, alkylcarbonyl, NO2, etc.; R34 = H, halo; R38, R39 = H or R38 and R39 when taken together with the carbon atom to which they are attached form a carbonyl group; R40 = cycloalkyl or aryl; X = CH2O, C(O)O, CH2P(O)(OH)O, etc.] or pharmaceutically acceptable salts thereof, and, optionally, at least one nitric oxide enhancing compound and/or at least one therapeutic agent. The compds. I can be optionally substituted with at least one nitric oxide enhancing group. E.g., a 3-step synthesis of II, starting from indomethacin, was given. II showed 84% inhibition of COX-2 at 1 μM. The invention also provides methods for (a) treating inflammation, pain and fever; (b) treating gastrointestinal disorders and/or improving the gastrointestinal properties of COX-2 selective inhibitors; (c) facilitating wound healing; (d) treating renal and/or respiratory toxicities; (e) treating disorders resulting from elevated levels of cyclooxygenase-2; (f) improving the cardiovascular profile of COX-2 selective inhibitors; (g) treating diseases resulting from oxidative stress; (h) treating endothelial dysfunctions; (j) treating diseases caused by endothelial dysfunctions; (k) treating inflammatory disease states and/or disorders; (1) treating ophthalmic disorders; and (m) treating peripheral vascular diseases. The nitric oxide enhancing groups are organic nitrates, organic nitrites, nitrosothiols, thionitrites, thionitrates, NONOates, heterocyclic nitric oxide donors and/or nitroxides. The heterocyclic nitric oxide donors are furoxans, sydnonimines, oxatriazole-5-ones and/or oxatriazole-5-imines.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:691081 CAPLUS

DOCUMENT NUMBER: 145:145264
TITLE: An improved process for the preparation of 2-arylpropionic acid
INVENTOR(S): Chaudhari, Raghunath Vitthal; Seayad, Jayashree; Mazeed, Seayad Abdul
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India
SOURCE: Indian, 33 pp.
CODEN: INXXAP
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 192841	A1	20040522	IN 1999-DE570	19990415
PRIORITY APPLN. INFO.:			IN 1999-DE570	19990415

OTHER SOURCE(S): CASREACT 145:145264; MARPAT 145:145264
AB An improved process for the preparation of 2-arylpropionic acids via carbonylation of the corresponding alc. is described. Reaction conditions and components include a halide source selected from the group consisting of halide salts or hydrohalic acid in range of 5 to 500 mol, water in the concentration range of of 1 to 6% (volume/volume), heterogeneous ruthenium, cobalt or nickel metal as a catalyst wherein the concentration of metal is 1 mol of metal for 500 to 50000 mol of alc. and a phosphine ligand in the range of 20 to 50 mol in an organic solvent such as herein described in the carbon monoxide atmospheric in an autoclave at a temperature ranging between 30 to 130°C, for a period ranging between 50 to 1500 psig, cooling the reaction mixture to ambient temperature, flushing the autoclave with nitrogen, separating the catalyst, removing the solvent by conventional methods and isolating the 2-aryl propionic acid derivative Several examples for the conversion of 1-(4'-isobutylphenyl)ethanol to ibuprofen are included.

L14 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:553802 CAPLUS
DOCUMENT NUMBER: 145:7869
TITLE: Catalytic carbonylation process for the preparation of 2-arylpropionic acids from 1-arylethanols and carbon monoxide
INVENTOR(S): Chaudhari, Raghunath Vitthal; Abdul, Seayad; Seayad, Jayasree
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India
SOURCE: Indian, 34 pp.
CODEN: INXXAP
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 191096	A1	20030920	IN 1999-DE684	19990505
PRIORITY APPLN. INFO.:			IN 1999-DE684	19990505

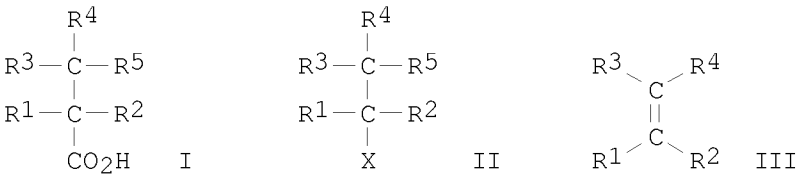
OTHER SOURCE(S): CASREACT 145:7869; MARPAT 145:7869

AB A catalytic carbonylation process for the preparation of 2-arylpropionic acids (e.g., ibuprofen) from arylethanols [e.g., 1-(4-isobutylphenyl)ethanol] and carbon monoxide and a catalyst system based on Pd (e.g., 1% Pd/C) or Pt and utilizing a phosphine ligand (e.g., triphenylphosphine), a halide salt (e.g., LiCl), and a protic acid (e.g., p-toluenesulfonic acid) is described.

L14 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1332124 CAPLUS
DOCUMENT NUMBER: 144:69622
TITLE: Process for the preparation of 2-aryl propionic acids by carbonylation of aralkyl alcohols and halides or hydrocarboxylation of aryl olefins in the presence of palladium catalyst, a halide promoter, and an organic acid
INVENTOR(S): Chaudhari, Raghunath Vitthal; Seayad, A.; Seayad, Jayasree
PATENT ASSIGNEE(S): India
SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont. of U.S. Ser. No. 628,158, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050283020	A1	20051222	US 2005-149804	20050610
PRIORITY APPLN. INFO.:			US 2000-628158	B1 20000728

OTHER SOURCE(S): CASREACT 144:69622; MARPAT 144:69622
GI



AB The invention relates to a process for the preparation of the known non-steroidal antiinflammatory agents 2-arylpropionic acids I by carbonylation of an aryl alc. or aryl halide II or hydrocarboxylation of an aryl olefin III in the presence of a halide promoter, an organic acid, and a palladium catalyst in an organic solvent. In compds. I, II, and III, R1 is (un)substituted aryl or (un)substituted naphthyl; R2, R3, R4, and R5 are independently selected from H, (un)substituted alkyl, (un)substituted aryl, (un)substituted arylalkyl, and (un)substituted

cycloalkyl; and X is OH, chloride, bromide, or iodide. The advantages of the process include high reaction rates, high selectivity to 2-aryl propionic acids under milder reaction conditions, and avoidance of the use of hazardous chems. like cyanides. For example, ibuprofen was prepared, in 99% selectivity, by carbonylation of 1-(4-isobutylphenyl)ethanol (p-IBPE) in the presence of 0.2 mol% of dichlorobis(triphenylphosphine)palladium, 20 mol% of p-toluenesulfonic acid, and 20 mol% of LiCl in Me Et ketone at 115°, with 99% conversion of p-IBPE. Naproxen was prepared, in 98% selectivity, by hydrocarboxylation of (6-methoxy-2-naphthyl)ethene in the presence of PdCl2(PPh3)2, p-TSA, and LiCl in Me Et ketone at 115°, with 99% conversion.

L14 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:965202 CAPLUS
DOCUMENT NUMBER: 141:395290
TITLE: Process for the adsorptive separation of palladium catalyst from crude reaction mixtures of arylacetic acids obtained by carbonylation
INVENTOR(S): Sava, Xavier; Roeper, Michael; Orgill, Colin; Cooper, John
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004096747	A1	20041111	WO 2004-EP4047		20040416
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
US 20060252938	A1	20061109	US 2005-554247		20051025
PRIORITY APPLN. INFO.:			US 2003-466123P	P	20030428
			WO 2004-EP4047	W	20040416

OTHER SOURCE(S): MARPAT 141:395290
AB A process for the separation of palladium from aromatic carboxylic acid -containing crude reaction mixts. (e.g., ibuprofen) obtained by the palladium-catalyzed carbonylation of arylalkanols [e.g., 1-(4-isobutylphenyl)ethanol] is achieved by adsorption of the palladium on solid adsorbents (e.g., activated carbon) where the adsorption is carried out in the absence of a reducing agents for palladium and at a temperature where the crude reaction mixture is molten.
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:515465 CAPLUS
DOCUMENT NUMBER: 141:54204
TITLE: Preparation of chiral aryl ketones in the treatment of neutrophil-dependent inflammatory diseases
INVENTOR(S): Allegretti, Marcello; Bertini, Riccardo; Cesta, Maria Candida; Bizzarri, Cinzia; Colotta, Francesco
PATENT ASSIGNEE(S): Dompe S.P.A., Italy
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052830	A1	20040624	WO 2003-EP13946	20031209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2507765	A1	20040624	CA 2003-2507765	20031209
AU 2003289993	A1	20040630	AU 2003-289993	20031209
EP 1581474	A1	20051005	EP 2003-782344	20031209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1732145	A	20060208	CN 2003-80107685	20031209
JP 2006509022	T	20060316	JP 2004-558041	20031209
US 20060247297	A1	20061102	US 2003-537824	20031209
NO 2005003086	A	20050623	NO 2005-3086	20050623
PRIORITY APPLN. INFO.:			EP 2002-27453 A	20021210
			WO 2003-EP13946 W	20031209

OTHER SOURCE(S): MARPAT 141:54204

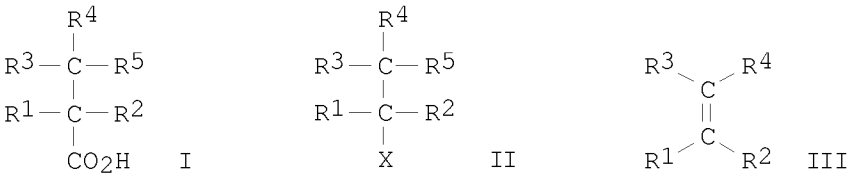
AB (R,S)-1-arylethyl ketone compds. of formula ArCH(Me)COCH(Ra)Rb and their single (R) and (S) enantiomers [wherein Ar = aryl; Ra, Rb = H, linear or branched C1-6 alkyl, Ph, α- or β-naphthyl, 2-, 3-, or 4-pyridyl, C1-4-alkylphenyl, C1-4 alkyl(α- or β-naphthyl), C1-4 alkyl(2-, 3-, or 4-pyridyl), cyano, carboxyamide, CO2H or its esters of formula CO2R" (wherein R" = the residue of linear or branched C1-6 aliphatic alc.), a phosphonate of formula PO(OR")2 (wherein R" is as defined above), a group of formula di-X-(CH2)n-Z (wherein X = CO, SO, SO2; Z = H, tert-Bu, iso-Pr, CO2R'', cyano, Ph, α- or β-naphthyl, 2-, 3-, or 4-pyridyl, C3-6 cycloalkyl, NH-BOC, NH2; n = 0 or an integer from 1 to 3; or Ra and Rb, with the carbon atom to which they are bound, form a cyclic residue 2,2-di(R')-substituted 4,6-dioxo-1,3-dioxane; wherein R' = Me or Et, or the two groups R' form a

cyclohexane or cyclopentane ring)] are prepared These compds. are useful in therapy as drugs for the treatment of diseases mediated by infiltrations of neutrophils induced by IL-8, such as psoriasis, rheumatoid arthritis, ulcerative colitis, acute respiratory distress syndrome (ARDS), idiopathic fibrosis, glomerulonephritis, bollous pemphigo and for the prevention and the treatment of damages caused by ischemia and reperfusion. Thus, (R)-(-)-ibuprofen (2 g, 9.69 mmol) was dissolved in 4 mL SOCl2 and refluxed for 4 h to give, after evaporation, (R)-2-(4-Isobutylphenyl)propanoyl chloride as an oily yellow residue (2.34 g; 9.34 mmol). The oil was dissolved in dry 3 mL CH2Cl2 and the resulting solution was added to a solution of 2,2-dimethyl-1,3-dioxan-2,5-dione (Meldrum's acid) (1.35 g; 9.34 mmol) and pyridine (1.83 mL; 22.9 mmol) in dry CH2Cl2 (7.5 mL) previously cooled to 0-5° with a water/ice bath, and left for 1 h at this temperature and then for another hour at room temperature to give, after workup, 2.69 g (R)-(+)-5-[2-(4-isobutylphenyl)propion-1-yl]-2,2-dimethyl-1,3-dioxan-4,6-dione. The latter compound was dissolved in dioxane (10 mL), treated with glacial acetic acid (0.84 mL) and H2O (0.13 mL), and heated to the reflux temperature for 3 h to give, after cooling and evaporation of the solvents and purification by means of flash chromatog. (R)-(-)-3-(4-isobutylphenyl)butan-2-one as a pale yellow oil (0.97 g; 4.75 mmol).

L14 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:961179 CAPLUS
DOCUMENT NUMBER: 140:16565
TITLE: Improved process for the preparation of 2-aryl propionic acids by carbonylation of aralkyl alcohols and halides or hydrocarboxylation of an aryl olefins in the presence of heterogeneous metal-ligand catalyst, a halide source, a protonic acid and water
INVENTOR(S): Chaudhari, Raghunath Vitthal; Seayad, Jayasree; Seayad, Abdul
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India
SOURCE: U.S., 38 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6660883	B1	20031209	US 2000-662035	20000914
PRIORITY APPLN. INFO.:			US 2000-662035	20000914

OTHER SOURCE(S): CASREACT 140:16565; MARPAT 140:16565
GI



AB The invention is directed to an improved process for the preparation of the known non-steroidal antiinflammatory agents 2-aryl propionic acids I by carbonylation of an aryl alc. or aryl halide II or hydrocarboxylation of an aryl olefin III in the presence of a halide source, a protonic acid, water and a catalyst system comprising of a heterogeneous metal and a phosphine ligand in an organic solvent [wherein R1 = (un)substituted Ph, naphthyl; R2, R3, R4, R5 = independently H, (un)substituted methyl; X = halo, OH]. The advantages include high reaction rates, high selectivity to 2-aryl propionic acids under milder reaction conditions, and simple and efficient catalyst separation and recycle. For example, ibuprofen was prepared, in 97.5% selectivity, by carbonylation of 1-(4-isobutylphenyl)ethanol (p-IBPE) in the presence of 1% Pd/γ-alumina/PPh3/p-TSA/LiCl/H2O in Me Et ketone at 115°, with 98% conversion of p-IBPE. 2-Phenylpropionic acid was prepared, in 98.3% selectivity, by hydrocarboxylation of styrene in the presence of Pd/PPh3/p-TSA/LiCl/H2O.
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:465590 CAPLUS
DOCUMENT NUMBER: 133:43327
TITLE: Method for preparing (S)-α- arylpropionic acid and its methyl ester by asymmetric carbonylation of α-arylethanol
INVENTOR(S): Xie, Baohan; Xia, Chungu; Kou, Yuan; Yin, Yuanqi; Lu, Shijie
PATENT ASSIGNEE(S): Lanzhou Inst. of Chemical Physics, Chinese Academy of Sciences, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp. CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1221729	A	19990707	CN 1997-125640	19971230

PRIORITY APPLN. INFO.: CN 1997-125640 19971230
OTHER SOURCE(S): CASREACT 133:43327; MARPAT 133:43327
AB (S)-α- Arylpropionic acid (aryl = Ph, isobutylphenyl, or 6-methoxy-2-naphthyl) or its Me ester are prepared by carbonylation of α- arylethanol with CO in solvent system in the presence of catalyst system at 90-130° and 6-10 MPa for 10-20 h. The catalyst system is composed of PdCl2(DDPPI)

(DDPPI = 1,4:3,6-dianhydro-2,5-di(diphenylphosphinyl)-iditol) as main catalyst, Cu2+ as co-catalyst, and water-soluble organic acidic medium. The solvent is composed of acetophenone, dioxane, or butanone, and water or methanol as co-solvent. The Cu2+ is selected from CuCl2, Cu(OAc)2, and their hydrate; and the organic acid from trifluoroacetic acid, methanesulfonic acid, benzenesulfonic acid , and toluenesulfonic acid. The mole ratio of Cu to Pd is 1-5, that of Pd to α- arylethanol is 0.001-0.05, and that of organic acid to α- arylethanol is 0.1-1.0.

L14 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:425444 CAPLUS
DOCUMENT NUMBER: 133:17283
TITLE: Synthesis of α- arylpropionic acids by carbonylation
INVENTOR(S): Xie, Baohan; Xia, Chungu; Kou, Yuan; Yin, Yuan
PATENT ASSIGNEE(S): Lanzhou Inst. of Chemical Physics, Chinese Academy of Sciences, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp. CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1221728	A	19990707	CN 1997-125639	19971230
CN 1059890	B	20001227		
PRIORITY APPLN. INFO.:			CN 1997-125639	19971230

OTHER SOURCE(S): CASREACT 133:17283; MARPAT 133:17283
AB Title compds. MeCHRCO2H (R = Ph, 4-Me3CC6H4, 6-methoxy-2-naphthyl) are prepared by reducing RCOMe (I) with H2 in the presence of 5-10% Pd/C in THF at 50° and H2 pressure of 0.5 MPa to obtain MeCHROH, adding phosphines, and carbonylating with CO in THF/HCl at 100-150° and CO pressure of 6-10 MPa for 12-28 h. The mole ratio of Pd to I is 0.01-0.05, and that of Pd to phosphines is 1:1.0-2.5. The phosphine is selected from triphenylphosphine, trinaphthylphosphine, and naphthyldiphenylphosphine.

L14 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:476645 CAPLUS
DOCUMENT NUMBER: 122:281365
TITLE: Application of chemical cytochrome P-450 model systems to studies on drug metabolism-VIII. Novel metabolism of carboxylic acids via oxidative decarboxylation
AUTHOR(S): Komuro, Masakatsu; Higuchi, Tsunehiko; Hirobe, Masaaki
CORPORATE SOURCE: Fac. Pharmaceutical Sciences, Univ. Tokyo, Tokyo, 113, Japan
SOURCE: Bioorganic & Medicinal Chemistry (1995), 3(1), 55-65 CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The oxidative decarboxylation of carboxylic acids by the chemical cytochrome P 450 model and rat liver microsomal systems was investigated. In the

chemical system using meso-tetrakis(pentafluorophenyl)porphyrin iron chloride [Fe(TPFPP)Cl] with iodosylbenzene (PhIO), α- arylcarboxylic acids and α,α,α-trisubstituted acetic acids are converted to the corresponding one-carbon-reduced alc. and carbonyl derivs. via oxidative decarboxylation. These products were then used as stds. to identify the metabolites in vivo and in vitro. Biliary excretion of the one-carbon-reduced derivative and the carbonyl derivative in bile duct-cannulated rats after oral administration of ketoprofen amounted to 0.22 and 0.03% of the dose, resp. In the case of indomethacin, the one-carbon-reduced derivative and the carbonyl derivative were detected as metabolites in the rat liver microsomal system, in yields of 2.8 and 0.29%, resp. Further, the yields of these two indomethacin metabolites were decreased in the presence of SKF-525A. Thus, these metabolites were formed by cytochrome P 450-dependent reactions. The ketoprofen and indomethacin metabolites had moderate to strong inhibitory activities on arachidonic acid-induced platelet aggregation and cyclooxygenase activity in vitro, comparable to those of the parent compds.

L14 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:354691 CAPLUS
DOCUMENT NUMBER: 123:55486
TITLE: Process for preparing optically active 2-aryl -alkanoic acids, in particular 2-aryl -propionic acids
INVENTOR(S): Paradies, Henrich H.; Hanna, Samir B.; Schneider, Bernd
PATENT ASSIGNEE(S): Medice Chem.-Pharm. Fabrik Putter GmbH and Co. KG, Iserlohn, Germany, Germany
SOURCE: U.S., 41 pp. Cont.-in-part of U.S. Ser. No. 352,269, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5380927	A	19950110	US 1990-524377	19900516
US 5266723	A	19931130	US 1990-486979	19900227
CA 2016887	A1	19901116	CA 1990-2016887	19900516
CA 2016888	A1	19901116	CA 1990-2016888	19900516
NO 9002190	A	19901119	NO 1990-2190	19900516
AU 9055091	A	19901122	AU 1990-55091	19900516
AU 9055092	A	19901122	AU 1990-55092	19900516
AU 643210	B2	19931111		
DE 4015794	A1	19901129	DE 1990-4015794	19900516
WO 9014073	A1	19901129	WO 1990-EP789	19900516
W: FI, HU, JP, KR, NO, SU				
DE 4015781	A1	19901213	DE 1990-4015781	19900516
ZA 9003756	A	19910227	ZA 1990-3756	19900516
ZA 9003759	A	19910227	ZA 1990-3759	19900516
HU 54610	A2	19910328	HU 1990-3057	19900516
CN 1050373	A	19910403	CN 1990-103564	19900516
CN 1053010	A	19910717	CN 1990-103225	19900516

HU 56263	A2	19910828	HU 1990-4479		19900516
JP 03209344	A	19910912	JP 1990-128061		19900516
JP 03506040	T	19911226	JP 1990-507349		19900516
DD 300404	A5	19920611	DD 1990-340734		19900516
DD 300688	A5	19920702	DD 1990-340735		19900516
AT 129230	T	19951115	AT 1990-109235		19900516
NO 9005132	A	19901129	NO 1990-5132		19901127
AU 9339878	A	19930819	AU 1993-39878		19930528
PRIORITY APPLN. INFO.:			US 1989-352269	B2	19890516
			WO 1990-EP789	W	19900516

OTHER SOURCE(S): MARPAT 123:55486

AB A chemical process is disclosed for the preparation of a pharmaceutically active compound in stereospecific form selected from the group of compds. having the formula ArCHRCO2H and their physiol. compatible salts and esters, wherein R is a lower alkyl and Ar a monocyclic, polycyclic or orthocondensed polycyclic aromatic group having up to 12 carbon atoms in the aromatic ring, and which may be substituted or unsubstituted in the aromatic ring, comprising the steps: (a) reacting a carbonyl substrate of the formula ArCOR where R and Ar have the meanings given above, with a stereospecific reagent in the presence of a reducing agent and an organic solvent to form the enantiomeric carbinol and (b) reacting the enantiomeric carbinol obtained to form the end product. Crystallog. data were reported for the 1:1 hydrogen-bonded complex between 1-amino-1-deoxy-D-glucitol and R-(-)-ibuprofen as a compound suitable for pharmaceutical use. Scattering data were also reported for melt formulations containing S-(+)-ibuprofen and polyoxyethylenoxide resin as a mol. solution, indicating retention of configuration upon pharmaceutical formulation. Thus, e.g., reaction of 1-(4-[2-methylpropyl]phenyl)ethanone with R*OH.LiAlH4 complex [R*OH = (+)-(2S,3R)-4- dimethylamino-3-methyl-1,2-diphenyl-2-butanol] at 0° in presence of mol. sieves afforded the R-(+)-carbinol in 98% e.e. and almost quant. chemical yield. Reaction with aged reduction agent at 20° afforded S-(-)-carbinol in 97% e.e. and 95% chemical yield.